ALKALINE CELL HAVING A CATHODE INCORPORATING ENHANCED GRAPHITE

ABSTRACT OF THE DISCLOSURE

An electrochemical cell having a cathode containing an expanded graphite as an electrically conductive carbon material. To provide enhanced service performance in the cell, the expanded graphite has a kerosene absorption in the range of 2.2 to 3.5 ml/g, an average particle size of 17 to 32 micrometers, a d₉₀ value of 40 to 85 micrometers, and an average surface area-to-mass ratio of at least 18 m²/g. A method is also provided for determining an optimum expanded graphite including the steps of measuring physical characteristics of the expanded graphite determining the performance of a cell containing the expanded graphite in the positive electrode, and determining the optimum expanded graphite for use in the cell.